



# ASSOCIATES

The Airborne Laser, the world's largest first attack laser aircraft, demonstrates its ability to refuel with help from an Edwards NKC-135E tanker crew during a test in the California skies. Courtesy photo



Far left: the Airborne Laser's System Integration Lab (left) and Ground Pressure Recovery Assembly at Edwards' South Base Complex. Courtesy photo

Left: Bobbi Garcia, who works for Rohmann Services in support of the Air Force Flight Test Center, took this photo of a B-2 completing a mission over the Pacific Ocean. The photo, which appeared in the Dec. 30, 2003 Aviation Week and Space Technology magazine, won the magazine's photo contest. Photo by Bobbi Garcia



The B-1B Lancer drops MK-82 500-pound inert bombs on the Edwards Precision Impact Range Area during one of its record-setting flights at the 2003 Edwards Open House and Air Show. Photo by Steve Zapka

## **31ST TEST AND EVALUATION SQUADRON**

60 N. Wolfe Ave.

(661) 277-2366 or DSN 527-2366

\*The 31st Test and Evaluation Squadron, established in 1917, is the home of Air Combat Command's maintenance, engineering and air crew experts who test, assess and evaluate effectiveness and suitability of new, multi-billion dollar U.S. Air Force weapons systems.

The Desert Pirates, as they are called, are the sole ACC organization at Edwards and are part of the 53rd Test and Evaluation Group, Nellis Air Force Base, Nev., and the 53rd Wing, Eglin Air Force Base, Fla.

The 31st represents the operational combat user during early flight testing to ensure the warfighter receives the world's best operational systems.

The unit is manned with operations, maintenance and engineering experts who plan and conduct tests, evaluate effectiveness and suitability and influence system designs with an operational perspective. Unit personnel are integrated into the F/A-22, B-1, B-2, B-52, Global Hawk, MQ-9, Joint Strike Fighter and Airborne Laser programs. Their results and conclusions support Department of Defense acquisition, deployment and employment decisions.

## **AIR FORCE AUDIT AGENCY AT EDWARDS**

90 Farrell Dr.

(661) 277-2899 or DSN 527-2899

\*The Edwards Area Audit Team provides the Air Force Flight Test Center, Air Force Research Laboratory's Propulsion Directorate, Plant 42 and March Air Reserve Base, Calif., independent, objective and quality audit services. These audit services promote the economy and efficiency of operations; evaluate programs and activities to assist management in achieving desired results; and assess fiduciary stewardship and accuracy of financial reporting.

## **AIR EDUCATION AND TRAINING COMMAND STUDIES AND ANALYSIS SQUADRON**

### **OPERATING LOCATION – A**

118 S. Wolfe Ave.

(661) 277-3501 or DSN 527-3501

\*AETC SAS, OL-A is a component of headquarters AETC and supports the Air Force and Department of Defense in the development of requirements and acquisition strategies of Air Force training systems. At Edwards, OL-A assists in the development of training systems for brand new acquisition systems, such as the Joint Strike Fighter and Airborne Laser programs. In addition to providing subject matter expertise in maintenance training, OL-A conducts Training System Requirements Analysis as outlined in AFI 36-2251 on the Air Force Integrated Maintenance Data System and Multi sensor Command and Control Aircraft systems.

## **AIR FORCE OFFICE OF SPECIAL INVESTIGATIONS, DETACHMENT 111**

115 E. Yeager Blvd.

(661) 277-2208 or DSN 527-2208

\*AFOSI, Detachment 111, provides special investigative services for the protection of Air Force and Department of Defense personnel, operations and material at Edwards. The unit strives to detect and provide early warning of worldwide threats to the Air Force, identify and resolve crime that threatens Air Force readiness or good order and discipline, combat threats to information systems and technologies, and detects/deters fraud in the acquisition of U.S. Air Force prioritized weapons systems.

## **AIR FORCE OPERATIONAL TEST AND EVALUATION CENTER, DETACHMENT 5**

192 E. Yeager Blvd.

(661) 277-3666 or DSN 527-3666

\*Detachment 5 is a component of the Air Force Operational Test and Evaluation Center located at Kirtland Air Force Base, NM. AFOTEC personnel work closely with the test center's combined test forces from concept development through system employment. The detachment primarily focuses on the critical follow-on process to the Air Force Flight Test Center's developmental test and evaluation effort. Injecting operational realism into the flight test program, AFOTEC personnel evaluate production-representative systems, under operational conditions, to ensure the nation's warfighters have the right tools to accomplish the mission effectively.

## **AIR FORCE OPERATIONAL TEST AND EVALUATION CENTER, DETACHMENT 6**

365 N. Flightline Rd.

(661) 275-3568 or DSN 525-3568

\*Detachment 6, which became operational Oct. 1, 2001, is the newest of AFOTEC's detachments and is responsible for the operational test and evaluation of the Air Force's new air superiority fighter, the F/A-22 Raptor. The Detachment 6 charter is to evaluate the effectiveness and suitability of the F/A-22 in an operationally realistic environment to ensure our warfighters receive the best overall air combat vehicle possible.

Detachment 6 personnel at Edwards include logisticians, engineers and pilots who work with the Air Force Flight Test Center's F/A-22 Combined Test Force. Detachment 6 also has personnel at AFOTEC Headquarters, Kirtland Air Force Base, N.M., including the F/A-22 operational test program manager, logisticians, analysts and operations support staff to provide coordination between locations, and also personnel at Nellis AFB, Nev., in preparation for follow-on test and evaluation in 2005.



## AIR FORCE PLANT 42 PRODUCTION FLIGHT TEST INSTALLATION

Palmdale, Calif.

\*Air Force Plant 42 is a government-owned, contractor-operated facility with proximity to both the concentration of aerospace industry in Los Angeles and the high-speed corridors and resources of the Air Force Flight Test Center at Edwards. The facility is uniquely situated to fully support the nation's newest and most advanced commercial and military aerospace systems. Air Force Plant 42 is one of four Air Force plants located throughout the United States and differs in that it hosts three major defense contractors: Boeing, Lockheed Martin and Northrop Grumman.

The mission of Air Force Plant 42 is to provide industrial facilities for production, modification, and depot maintenance and flight test of U.S. aerospace systems. Air Force Plant 42 is composed of the following military units as well as the three DoD contractors mentioned above:

*Doug Mendez, Edwards firefighter, checks his fire safety equipment to ensure he is prepared. Photo by Thomas Powell*



### Aeronautical Systems Center, Detachment 1

2503 E. Ave. P  
Palmdale, Calif.  
(661) 272-6770

\*Detachment 1, a component of ASC, Wright-Patterson Air Force Base, Ohio, provides command and control of Air Force Plant 42, airfield complex and industrial facilities used for production, modification, depot maintenance and flight test of U.S. aerospace systems. The unit provides security, airfield management, maintenance and engineering support, fire protection, crash and rescue, recovery and safety, information management, and contract and property management.

### 410th Flight Test Squadron/F-117 Combined Test Force

15th St. E. and Ave. P  
Palmdale, Calif.  
(661) 572-5190

\*The 410th Flight Test Squadron, a part of the 412th Test Wing and Air Force Flight Test Center, provides operational F-117A support by conducting all developmental test and evaluation and depot maintenance acceptance flights prior to return to operational units.

### Warner Robins Air Logistics Center, Detachment 2

2030 E. Ave. M  
Palmdale, Calif.  
(661) 277-4000

\*Detachment 2, a unit of Warner Robins ALC, Robins Air Force Base, Ga., is the sole Air Force unit responsible for planning, conducting and reporting on all U-2 flight test programs. The unit conducts U-2 developmental and operational mission support and post-depot maintenance acceptance flights. The unit also provides quality assurance oversight of depot and flight test maintenance activity and validates technical changes to the aircraft, equipment and technical publications.



*An F-117A releases a Joint Direct Attack Munition over the Edwards' Precision Impact Range.*

*Photo by Bobbi Garcia*

## AREA DEFENSE COUNSEL

20 W. Popson Ave.

(661) 277-2809 or DSN 527-2809

\*The Area Defense Counsel, the equivalent of a public defender, represents active duty military members who are

accused of crimes or adverse administrative actions. The counsel focuses on legal issues pertaining to military justice such as letters of reprimand, Articles 15, courts-martial and medical or flying evaluation boards.



*Rocket Test Stand 2-A is the only Department of Defense stand capable of performing full-scale rocket thrust chamber development testing in the 750,000-pounds-of-thrust class. Courtesy photo*

## **AIR FORCE RESEARCH LABORATORY PROPULSION DIRECTORATE, DETACHMENT 7**

Public Affairs Office, 5 Pollux Dr.  
(661) 275-5465 or DSN 525-5465  
www.pr.af.mil

\*Development of rocket propulsion technologies for current and future Air Force space and missile systems is the responsibility of the Air Force Research Laboratory's Propulsion Directorate at Edwards.

The Air Force Research Laboratory, headquartered at Wright-Patterson Air Force Base, Ohio, encompasses all Air Force research and development with directorates and facilities throughout the United States.

The directorate here has devoted its efforts to the discovery, development and application of scientific and engineering answers to national defense rocket propulsion needs for more than 50 years.

More than 250 scientists, engineers, technicians and support staff advance this technology area. They are assisted by additional on-site contractors and base support organizations.

The propulsion directorate is the development center for all Air Force rocket and missile propulsion technologies including propellants, combustion, characterization of exhaust plumes, and the materials and structures unique to rocket propulsion. Nearly every U.S. rocket-propelled system used today for tactical operations, ballistic launch, space launch and space operations can trace its technology back to this facility.

The directorate's unique state-of-the-art research equipment and physical assets cover more than 65 square miles of Edwards. They include static rocket test stands capable of holding test firings up to 10 million pounds of thrust.

Known historically as the 'Rocket Site,' its current efforts are devoted to a national master plan for rocket propulsion technology research involving all military services, NASA and the rocket industry. Called IHPRT, or Integrated High Payoff Rocket Propulsion Technology, this research, coupled with advanced propulsion concept demonstrations will push the advancement of rocket propulsion technology into the new century.

## **ARMY AND AIR FORCE EXCHANGE SERVICE**

W. 240 FitzGerald Blvd.

(661) 258-1078

\*In a continuing effort to improve quality of life at Edwards, the Army and Air Force Exchange Service provides the community with services, products and retail facilities from the Shoppette complex with a Class Six, Pizza Hut and Subway to a car care center with 24-hour credit card reader gas dispensers and Enterprise Car Rental.

Located in the 73,000-square-foot base exchange complex is military clothing sales, beauty and barbershops, a same-day optical shop, a florist, a video arcade, cellular phone store, alterations shop, a General Nutrition Center and an Armed Forces Bank. Additionally, the exchange food court houses Anthony's Pizza, Baskin Robbins, Popeye's Chicken, Robin Hood and Taco Bell Express.

AAFES provides other food franchises, concessions and snack bars, including Burger King, the Thai Garden restaurant and cafeterias at South Base, NASA, Base Operations, Rocket Lab and at Mary's Place located in Bldg. 1600. For further shopping convenience, AAFES features a Shoppette complex with a Class Six, dry cleaners and laundromat. There is also a Troop Store with a barbershop on base.

## **CIVIL AIR PATROL, EDWARDS AIR FORCE BASE COMPOSITE, SQUADRON 84**

Muroc Manor, Bldg. 16

Rest Road, South Base

(661) 277-6543 or DSN 527-6543

\*The Civil Air Patrol is the official auxiliary of the U.S. Air Force and has three missions: fostering internal and external aerospace education; operating a cadet program including aerospace education, leadership training, physical fitness, moral leadership and an opportunity to learn to fly; and supporting emergency services through search and rescue, disaster relief and humanitarian services.

## **DEFENSE COMMISSARY AGENCY**

312 W. FitzGerald Ave.

(661) 277-4589 or DSN 527-4589

\*The Defense Commissary Agency aims to ensure military readiness and retention of quality personnel by providing a valuable part of the military compensation package. The Edwards Commissary strives to enhance quality of life by providing groceries and household supplies at-cost resale value. The commissary is open Monday noon – 6 p.m., Tuesday through Friday 10 a.m. – 6:30 p.m., Saturday 9 a.m. – 6 p.m. and Sunday 10 a.m. – 6 p.m. A full-service deli, bakery and meat counter is available.



## DEFENSE SECURITY SERVICE

70 E. Forbes Ave.

(661) 277-4865, 277-3287 or 277-8753

\*The Defense Security Service conducts personnel security investigations for civilian, military and industrial personnel who require access to classified Department of Defense information.

## FEDERAL AVIATION ADMINISTRATION HIGH DESERT TERMINAL RADAR APPROACH CONTROL

100 E. Sparks Rd.

(661) 258-6300 or DSN 527-2023

\*The FAA's High Desert TRACON, radio call sign Joshua Approach, provides mission-related air traffic control services to Department of Defense and DoD-sponsored aircraft within the entire R-2508 airspace complex, encompassing nearly 25,000 square miles.

The TRACON's Department of Transportation, FAA civilian personnel also provide air traffic control services to civil aircraft within and outside the special-use airspace.

## MARINE AIRCRAFT GROUP 46, DETACHMENT BRAVO

199 S. Wolfe Ave.

(661) 275-3435 or 275-3446

\*Two Marine Corps Reserve helicopter squadrons and the detachment headquarters support staff representing the command at Marine Corps Air Station Miramar, north of San Diego, Calif., relocated to Edwards in May 1999 following the closure of Marine Corps Air Station El Toro, Calif. There are more than 350 Marines and sailors with about half of those being active duty and living in the local area and the others being Reservists commuting from their homes throughout California and the United States.

Marine Heavy Helicopter Squadron 769 (HMH-769) operates 11 CH-53E Super Stallions. Their mission is to transport heavy equipment, weapons and supplies during ship-to-shore movements and amphibious assaults.

Marine Medium Helicopter Squadron 764 (HMM-764) operates 13 CH-46E Sea Knights. Their mission is to transport combat troops in initial assault waves and follow-on stages of amphibious operations ashore.

Both squadrons primarily support Marines at the nearest Marine Corps bases, Camp Pendleton and 29 Palms, while assisting Team Edwards with VIP transport, medical evacuations, photo and shuttle landing support and other assistance during base and community emergencies.



*Lightening strikes in the horizon over the flightline during a thunderstorm at Edwards. Photo by James Shryne*

## NASA DRYDEN FLIGHT RESEARCH CENTER

Public Affairs Office, Lilly Dr.

(661) 276-3449

[www.dfrc.nasa.gov](http://www.dfrc.nasa.gov)

\*The Dryden Flight Research Center is NASA's primary installation for aerospace flight research and is NASA's Center of Excellence for atmospheric flight operations. The center's charter is to research, develop, verify and transfer advanced aeronautics, space and related technologies to industry and other government agencies. The center also supports the Space Shuttle program as an alternate landing site.

Dryden's history dates back to late 1946, when 12 employees arrived at what is now Edwards from the National Advisory Committee for Aeronautics Langley Memorial Aeronautical Laboratory, Hampton, Va. Their goal was to prepare for X-1 supersonic research flights in a joint NACA-Army Air Forces-Bell Aircraft program. The NACA was NASA's predecessor.

Since the days of the X-1, the first aircraft to fly faster than the speed of sound, the center has grown in size and significance and is associated with many important milestones in aviation research: supersonic and hypersonic flight, wingless lifting bodies, fly-by-wire, supercritical and forward-swept wings and space shuttles.

Dryden continues to pioneer programs that support NASA's Aeronautics Research Mission, contributing to revolutionary leaps in technology by reducing the cost of access to space and improving global civil aviation.

The Airborne Science Program supports the requirements of NASA's Office of Science. Dryden maintains and operates two ER-2s and a DC-8. The aircraft collect data for many experiments in support of projects

## U.S. ARMY VETERINARY SERVICE

900 Kincheloe Ave.

(661) 275-PETS or DSN 525-7387

\*The U.S. Army Veterinary Service provides comprehensive veterinary care to all government-owned animals such as the 95th Security Forces Squadron's military working dogs, and to all service members' privately-owned animals through the Veterinary Treatment Facility. The service ensures disease prevention and control programs on base and the compliance of all commercial and military food establishments with sanitary standards. The service also maintains a liaison with local veterinary professional organizations in order to provide assistance during civic emergencies.



serving the world scientific community.

Dryden has been the site of 49 space shuttle landings since the first orbital flight in April 1981. After an Edwards' landing, space shuttles are serviced at Dryden for ferry flights back to Kennedy Space Center in Florida atop one of NASA's two modified Boeing 747 Shuttle Carrier Aircraft.

Kennedy is the primary landing site for all shuttle missions, but Dryden remains an alternate landing site for future missions when inclement weather affects Florida or in the event of an emergency.

Along with research and support aircraft, Dryden assets include simulation laboratories; a high-temperature and loads-calibration laboratory; aircraft flight-instrumentation capability; a flow-visualization facility to study air flow patterns; a data-analysis facility to process flight research data; and remotely piloted vehicle flight research expertise.

In addition, Dryden's Research Aircraft Integration Facility simultaneously checks aircraft flight controls, avionics, electronics and other systems. This facility is the only one of its type in NASA and is designed to speed up and enhance systems integration and preflight checks on research aircraft.

From a handful of engineers who established the center in the late 1940s, Dryden now employs approximately 1,300 civilian and contract workers.

## CONTRACTORS

- Ace Engineering, Inc. (SABER)  
(661) 277-1750
- AMPB Security Services  
(661) 277-3714
- Bell-Boeing Company (CV-22)  
(661) 277-6868, Ext. 2788
- The Boeing Company  
(661) 275-3169/FAX (661) 275-3179
- Chugach Management Services, Inc.  
(Family Housing Maintenance)  
(661) 258-1044
- E-Med Tech, Inc.  
(AFRL Ambulance and EMTs)  
(661) 275-5333
- ERC  
(AFRL Research in Propulsion Sciences)  
(661) 275-6178
- General Electric  
(661) 277-7347
- Accent Services Comp. Inc.  
(custodial services)  
(661) 258-4181
- JT3 (J-TECH)  
(661) 277-9107
- J. Torres Company  
(refuse/recycling)  
(661) 277-7407
- Linker Services (food service)  
(661) 258-4021
- Lockheed Martin, Marietta, Ga.  
(F/A-22)  
(661) 277-5804
- Lockheed Martin, Fort Worth, Texas  
(F-16)  
(661) 277-4216/FAX (661) 277-2645
- N & N Travel Services  
(official travel only)  
(661) 277-3160
- Northrop/Grumman (B-2)  
(661) 275-0004/FAX (661) 275-0010
- Northrop/Grumman (RAC)  
(661) 275-0609
- Pratt & Whitney  
(661) 275-4193/FAX (661) 258-6523
- Raytheon Aerospace  
(661) 277-9777 or 277-9790
- Spiral Technology  
(AFRL Advanced Research and Engineering Support)  
(661) 275-5678
- Sverdrup Technology,  
(AFRL Research Operations Support Services)  
(661) 275-5618
- TYBRIN  
(661) 277-0096 or 277-0141
- J.K. Hill & Associates, Inc.  
(661) 277-3522
- Veridian Engineering  
(661) 277-9537 or (661) 277-2764